AS 2550.3:2025

Cranes, hoists and winches — Safe use

Part 3: Bridge, gantry, portal (including container cranes), jib cranes and monorail beams



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Australian Standard®

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Part 3: Bridge, gantry, portal (including container cranes), jib cranes and monorail beams

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How to read this Standard

This page explains the meaning of the language and structure of this Standard.

Refer to Standards Australia's Standardisation Guide 006 for more details about drafting rules.

Australian and Australian/New Zealand Standards are voluntary unless they are referenced in legislation or called up in contracts.

Requirements

To conform to a Standard, all requirements in the Standard need to be met.

A requirement is any statement in the Standard which uses the word "shall".

Recommendations, permissions and possibilities

The following words are commonly used in Standards, but statements using them do not have to be followed to conform to the Standard:

(a) "should" means that something is recommended.

(b) "may" means that something is permitted.

(c) "can" means that something is possible.

Structure of Standards

A Standard always has the following parts:

(i) The Preface states who developed the Standard, what the Standard is aiming to do, and how it relates to other documents.

(ii) The Scope states what the Standard is about, what it covers and what it does not cover.

(iii) The Normative references clause lists other documents that are referenced in the Standard as part of requirements.

(iv) The Terms and definitions clause defines important terms to help with understanding the Standard.

A Standard may also include other parts, such as the following:

(1) A normative appendix sets additional requirements that need to be conformed to.

(2) An informative appendix provides additional information or guidance. They usually do not contain requirements. If an informative appendix does contain requirements, the Standard will explain when those requirements apply.

(3) A Bibliography lists documents referenced in the Standard but not as part of requirements.

Many Standards include notes. Notes provide recommendations and/or guidance only. They never contain requirements.

Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee ME-005, Cranes, to supersede AS 2550.3:2002, *Cranes, hoists and winches—Safe use, Part 3: Bridge, gantry, portal (including container cranes) and jib cranes*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this document as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this document is to provide requirements for the safe use of bridge, gantry, portal (including container cranes), jib cranes and monorail beams. “Safe use” is intended to mean planning, selection, siting, erection and dismantling, operation, maintenance, inspection and repair of the crane.

This document is complementary to AS 2550.1, but the requirements given herein take precedence.

A list of all parts in the AS(/NZS) 2550 series can be found in the Standards Australia online catalogue.

The major changes in this edition are as follows:

(a) Update to inspection requirements for the crane and runways.

(b) Update on operational information previously listed in AS 2550.1, including but not limited to the following:

  (i) Information on multiple crane or hoist lifting.

  (ii) Lifting of persons.

  (iii) Lifting attachments.

  (iv) Designed lifts.

The terms “normative” and “informative” are used in Standards to define the application of the appendices to which they apply. A “normative” appendix is an integral part of a Standard, whereas an “informative” appendix is only for information and guidance.

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Australian Standard®

Cranes, hoists and winches — Safe use

Part 3: Bridge, gantry, portal (including container cranes), jib cranes and monorail beams

1 Scope and general

1.1 Scope

This document provides requirements for the safe use of bridge, gantry, portal (including container cranes), jib cranes and monorail beams. It also provides recommended means to appraise *in situ* cranes that do not have detailed records of their past use.

1.2 Application

This document is intended for use by owners, maintainers, and operators of bridge, gantry, portal (including container cranes), jib cranes and monorail beams as defined in AS 2549.

1.3 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS 1418.1, *Cranes, hoists and winches, Part 1: General requirements*

AS 1418.3, *Cranes, hoists and winches, Part 3: Bridge, gantry, portal (including container cranes) and jib cranes*

AS 1418.17, *Cranes (including hoists and winches), Part 17: Design and construction of workboxes*

AS 1418.18, *Cranes, hoists and winches, Part 18: Crane runways and monorails*

AS 2076, *Wire-rope grips for non-lifting applications*

AS 2549, *Cranes, hoists and winches — Glossary of terms*

AS 2550.1, *Cranes, hoists and winches—Safe use, Part 1: General requirements*

AS 2759, *Steel wire rope—Use, operation and maintenance*

AS 4991, *Lifting devices*

AS 5229.1, *Cranes — Tolerances for wheels and travel and traversing tracks, Part 1: General (ISO 12488-1:2012, MOD)*

AS 5240.3, *Cranes — Access, guards and restraints, Part 3: Bridge and gantry cranes (ISO 11660-5:2001, MOD)*

AS 5246.1, *Cranes — Classification, Part 1: General (ISO 4301-1:2016, MOD)*

AS/NZS 1891.1, *Personal equipment for work at height, Part 1: Manufacturing requirements for full body combination and lower body harnesses*

AS/NZS 3000, *Electrical installations (known as the Australian/New Zealand Wiring Rules)*

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AS/NZS ISO/IEC 17020, *Conformity assessment—Requirements for the operation of various types of bodies performing inspection*

1.4 Terms and definitions

For the purposes of this document, the terms and definitions given in AS 2549 and AS 2550.1 apply.

1.5 Instructions

Instructions shall be prepared, maintained and made readily available to the appropriate personnel to ensure the safe use of the crane. Such instructions should include the manufacturer's instructions, recommendations and specifications. Where instructions, recommendations and specifications are not available from the manufacturer or are deemed inappropriate, they shall be drawn up by a competent person.

2 Planning and selection

2.1 General

Project planning for obtaining or upgrading and using bridge, gantry, portal (including container cranes), jib cranes and monorail beams shall include planning for their safe use and ongoing serviceability. All such planning shall take place early in the project. Plans should be revisited if the scope of work changes through the life of the crane. The planning should include consultation with the crane's manufacturer, proprietor, supplier, operator, designer, importer and agent.

2.2 Planning

The scope of planning activities shall include a hazard identification and risk assessment and, as a minimum, the following:

(a) Location. Cranes shall be located to ensure clearances are maintained in accordance with AS 1418.3. Consideration shall be given to the presence of proximity hazards at the crane location, such as —

  (i) other cranes;

  (ii) access areas;

  (iii) dimensions of fixed hazards in the travel envelope of the crane;

  (iv) personnel movement within the working area;

  (v) mobile equipment movement within the working area;

  (vi) overhead powerlines;

  (vii) dangerous goods storage; and

  (viii) aircraft paths.

(b) The installation, commissioning (including load testing), disassembly and relocation of the crane.

(c) Ensuring the supporting structure is capable of supporting the crane as defined in AS 1418.18, including impact to adjacent crane runway(s) which share common support columns or footings.

(d) Ensuring the rails and runway girders conform to the requirements of AS 5229.1:2024 Table 2.

(e) Appraisal of any existing crane for suitability of use, ensuring that the appraisal is carried out by a competent person.

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